



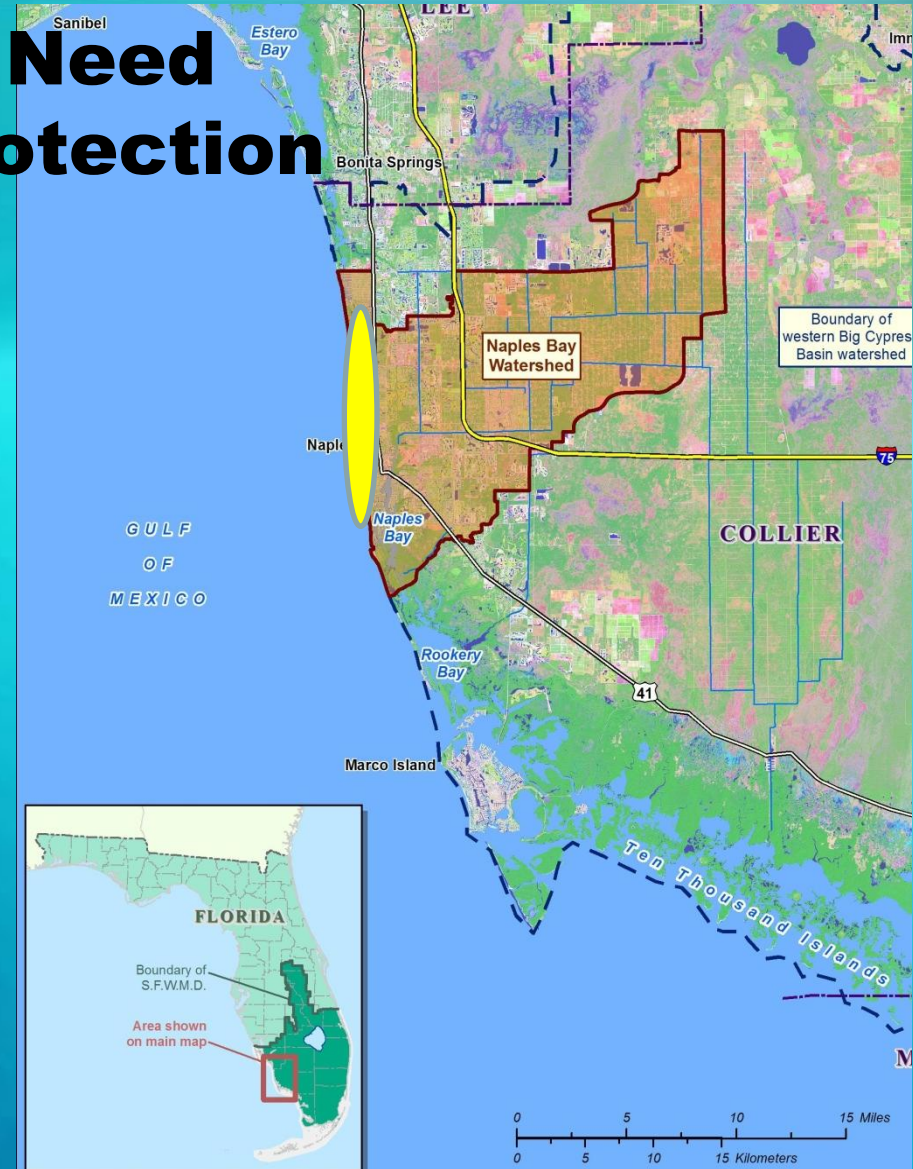
Naples Bay Restoration Action Plan



Clarence Tears, Big Cypress Basin Director

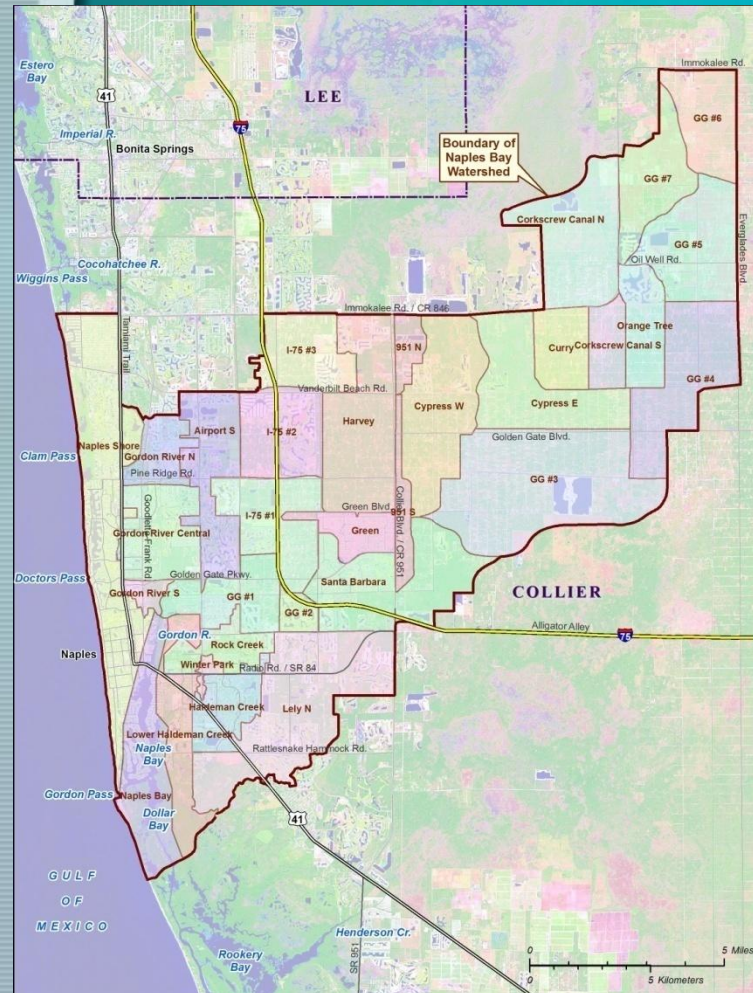
Conditions Leading to Need for Restoration and Protection

- Increased drainage area
 - Too much fresh water (127 sq. mile area)
 - Timing
 - Distribution of fresh water
 - Altered the volume, quality, timing and mixing characteristics of freshwater reaching the Bay
- TMDLs-Water Body Impairments Include:
 - Copper
 - Fecal Coliform
 - Iron
 - DO (from TN, TP, BOD)



Conditions Leading to Need for Restoration and Protection

- 60 years of canal drainage and urban growth
 - reduced water clarity, increased contaminants and nutrients, and reduced dissolved oxygen
- City and County antiquated stormwater outfalls
- Changes in salinity patterns
 - declines in seagrass beds and impacts to all levels of flora and fauna





Accomplishments to Date

- **Studies completed by Big Cypress Basin**
 - **Golden Gate Water Management Plan (1981)**
 - **Naples Bay SWIM plan (2006)**
 - **BCB Basin Watershed Management Plan and Environmental Assessment (1998)**
 - **SW Florida Feasibility Study (2011)**
 - **Hydrologic & Hydraulics studies for improvement of water control capital structures (1987-on going)**

Accomplishments to Date

- Supported local governments improved stormwater management efforts
- Assisted with Freedom Memorial Water Quality park
- Assisting City of Naples with ASR/Reuse project (-5mgd out of GGM)
- Improved vegetation management



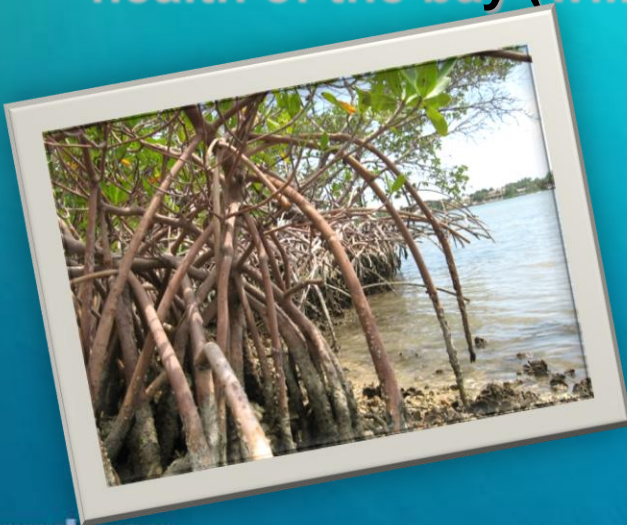


Future Improvement Actions and Efforts

- **Retrofit of Golden Gate Canal Weir#6 and #7**
- **Reconstruction of Miller Canal Weir#3**
- **Henderson Creek Diversion – Design, Land Acquisition and Construction**
- **Reconstruction of Henderson Creek Weir#2**
- **Retrofit of Cypress Canal Weir#4A1**
- **Retrofit of Golden Gate Canal Weir#4 and #5**
- **North Belle Meade Rehydration Plan – Henderson Creek Flow-way**

Future Actions and Efforts (Continued)

- Continuation of Hydrologic and Water Quality Monitoring
- Hydrodynamic Modeling of Naples Bay and Rookery Bay to evaluate effects of altered flow regime
- Environmental Assessment to evaluate ecological benefits – seagrasses, oysters as indicators of the health of the bay (will be needed for permits).



Cost of Restoration

